10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

R Cdk4 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP20515b

Specification

R Cdk4 Blocking Peptide (C-term) - Product Information

Primary Accession P35426

R Cdk4 Blocking Peptide (C-term) - Additional Information

Gene ID 94201

Other Names
Cyclin-dependent kinase 4, Cell division protein kinase 4, PSK-J3, Cdk4

Target/Specificity
The synthetic peptide sequence is selected from aa 292-303 of Rat Cdk4

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

R Cdk4 Blocking Peptide (C-term) - Protein Information

Name Cdk4

Function
Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation

R Cdk4 Blocking Peptide (C-term) - Background

Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).

R Cdk4 Blocking Peptide (C-term) - References

Cho F.S., et al. Biochem. Biophys. Res. Commun. 191:860-865(1993).

of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:P11802}. Nucleus {ECO:0000250|UniProtKB:P11802}. Nucleus membrane {ECO:0000250|UniProtKB:P11802}. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus (By similarity). {ECO:0000250|UniProtKB:P11802}

Tissue Location
Expressed in fetal and adult lung. Also expressed in brain, heart, liver, skeletal muscle and testes

R Cdk4 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides